

Enclosure of letter from Eliza Symonds Bell to Alexander Graham Bell, March 1877

Packages Forwarded Eight Miles in Two Seconds .

On Sunday, Feb. 28, the pneumatic mail system was opened for public use in the city of Vienna, and for a few days of its working it appears to have been eminently satisfactory. By this method letters and packages not exceeding two ounces in weight can be sent from one end of the city to another—a distance of about eight miles—in something less than two seconds, so that, adding to this the time necessary for making up packages, assorting them, and delivering them, the whole is just about one hour. But this only covers extreme distances, and the managers of this system in Vienna say that in a short time the time between the receipt and delivery will be greatly reduced. In fact, between stations only two or three miles distant from each other, such packages are even now delivered within twenty minutes after being deposited. As the General Post-office in Vienna is also in the building of the general telegraph office, powerful steam engines are constantly at work compressing atmospheric air in a mammoth reservoir, from which the double system of cast-iron pipes, laid three feet under the surface of the streets is fed. One system of pipes serves for carrying packages, and the other for pushing them ahead in the other direction. At the seven principal stations, in various parts of the city, similar engines are kept at work day and night drawing the air from the pipes and creating a vacuum in front of the packages, which are thus more readily pressed forward by the expansive force of the compressed air behind them. The 60 substations are connected not only with the two central offices, but also with each other by this double system of pipes. The despatch of each package is announced by telegraph to the office to which it is sent, and to all intervening offices, to advise the latter not to stop it on its way. The pipes are six inches in diameter, with a perfectly smooth polished inner surface, and the packages are made up in india-rubber cylinders of various lengths. The postage on mail matter must be prepaid at

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the rate of two kreutzers (one cent) for each half half ounce or fraction, which is evidently much cheaper than the two cent postage for the city letters in this country. This is the first instance of a large city—Vienna has about 900,000 inhabitants—giving its people such facilities of correspondence at a moderate cost.— *N. Y. Mercury* .

Instinct and Reason .

Says an English writer: The existence of an essential difference between instinct and reason, and the unerring certainty of the former as compared to the processes of the latter, were till lately taken for granted. In the present day, however, a conviction seems to be dawning on the minds of many that it is well not to stake too much on the certain operation of instinct of any sort. An impetus will perhaps be given to this tendency towards caution by the action of a rat—not indeed a seceder from the opposite camp, but a *bona fide* rat—who has declined to follow the course assigned to him by the best zoologists. This rat was destined the other day as breakfast for a serpent in the Jardin des Plantes at Paris, and was with this purpose introduced into the cage of the reptile. It was unquestionably the rat's duty, on being brought face to face with the serpent, to have become fascinated, and to have obeyed the instinct which is supposed to deliver “such small deer” an unresisting prey to the destroyer. Far from fulfilling the duty traditionally incumbent upon him, this daring innovator flew at the throat of the snake and bit it so severely as to produce instant death and a loss to the gardens of about 2,000 francs' worth of serpent. This unexpected result has, however, had the good effect of determining the managers of the Jardin des Plantes to feed their reptiles upon dead animals only, the “fascination theory” having proved an utter failure.